



U.S. Department
of Transportation

**Federal Aviation
Administration**

SAIB NM-05-69
July 8, 2005

SPECIAL AIRWORTHINESS INFORMATION BULLETIN

Aircraft Certification Service
Washington, DC

<http://www.faa.gov/aircraft/safety/alerts/>

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) provides information to you, owners and operators of **various Surplus Military airplanes (table 1) manufactured by Northrop Grumman Corporation.** We used "Jane's All The World's Aircraft" reference material from 1954 through 1973, as well as information from operators to determine the various aircraft for incorporation in this SAIB.

Background

The California Department of Forestry has two Type Certificates for aircraft similar to the aircraft identified in this SAIB and includes models **S-2F3AT and TS-2A.** Their type certificates contain approved maintenance procedures for their aircraft based on military maintenance manuals and procedures available from the public domain. This SAIB provides information to all potentially affected operators, including those with airplanes that don't have a US type certificate.

TABLE 1

Model	Models with Variations for different Customers and Missions
S-2F1 (S-2A)	US-2A, S2F-1T (TS-2A), S2F-1S (S-2B US-2B), S2F-1S1 (S-2F) CS2F-1, CS2F-2, S-2FT

TABLE 1 (continued)

S-2F2	S-2C, US-2C, S2F-2P (RS-2C)
S-2F3, (S-2D)	E2-D, US-2D, S2F-3S (S-2E), S-2G, YS-2G, S-2T, CS2F-3, S-2F3AT, S2F-3T
C-1	C-1A, TF-1, TF-1Q (EC-1A)

During annual inspections, an operator found the horizontal stabilizer mount fittings, P/N 89TM2060-1 and -3 had exfoliation corrosion. While replacing those fittings, a fleet wide inspection of the operator's aircraft found additional aircraft with corrosion. They repaired all corrosion.

The aircraft's horizontal stabilizer structure has a semi-monocoque construction. While other aspects of the construction of the horizontal stabilizer may have variations, the horizontal stabilizer mount fittings P/N 89TM2060-1, -2, -3 and -4 are generally common to all listed aircraft. We based our recommendations on dimensions taken from a Navy S-2G model aircraft.

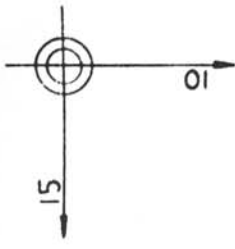
Recommendations

We are concerned about corrosion and related cracking in the horizontal stabilizer mounting fitting of aircraft that may not have adequate maintenance programs. We have considered the consequences of horizontal stabilizer mount fitting corrosion and operator's actions to mitigate the hazards for their fleet.

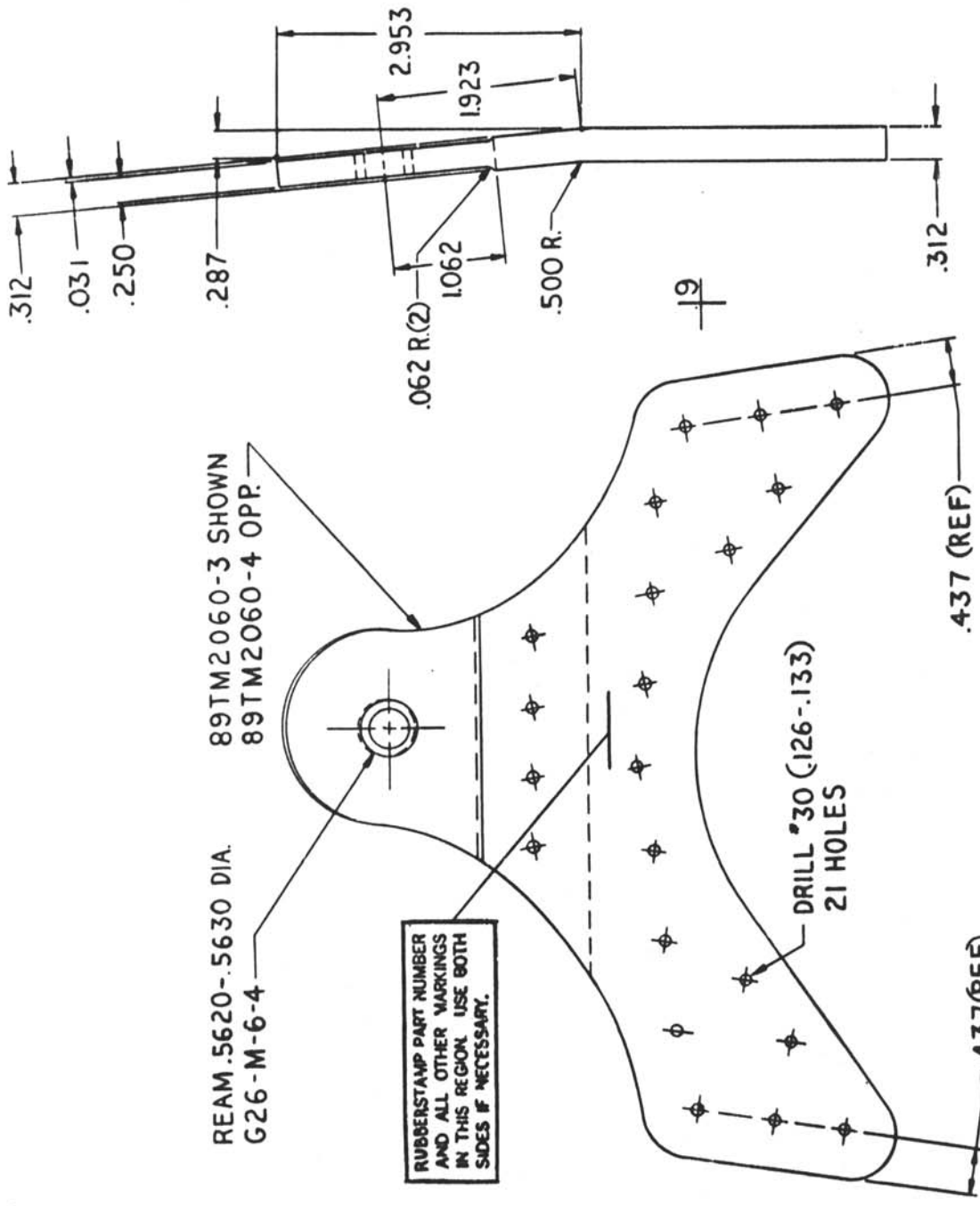
We highly recommend you perform annual inspections to visually inspect the horizontal stabilizer mount fitting for corrosion. The mount fittings can be found on the horizontal stabilizer 4.75 inches outboard of the airplane centerline on both left and right sides of the horizontal stabilizer at fuselage station 451.667. If you find any corrosion, you should repair or replace the part. You can perform the inspections under the military maintenance manuals (portions attached).

For Further Information Contact

John L. Cecil, Aerospace Engineer, FAA
Transport Aircraft Directorate, LAACO,
ANM-120L, 3960 Paramount Boulevard,
Suite 100 Lakewood, CA 90712-4137;
phone: 562.627.5228; fax: 562.627.5210;
email: john.cecil@faa.gov



NOTE:
HOLES TO BE DRILLED
FROM MASTER DRILL
PLATE # 2T45429.



89TM2060-1 SHOWN
89TM2060-2 OPP.

GRAIN OPTIONAL

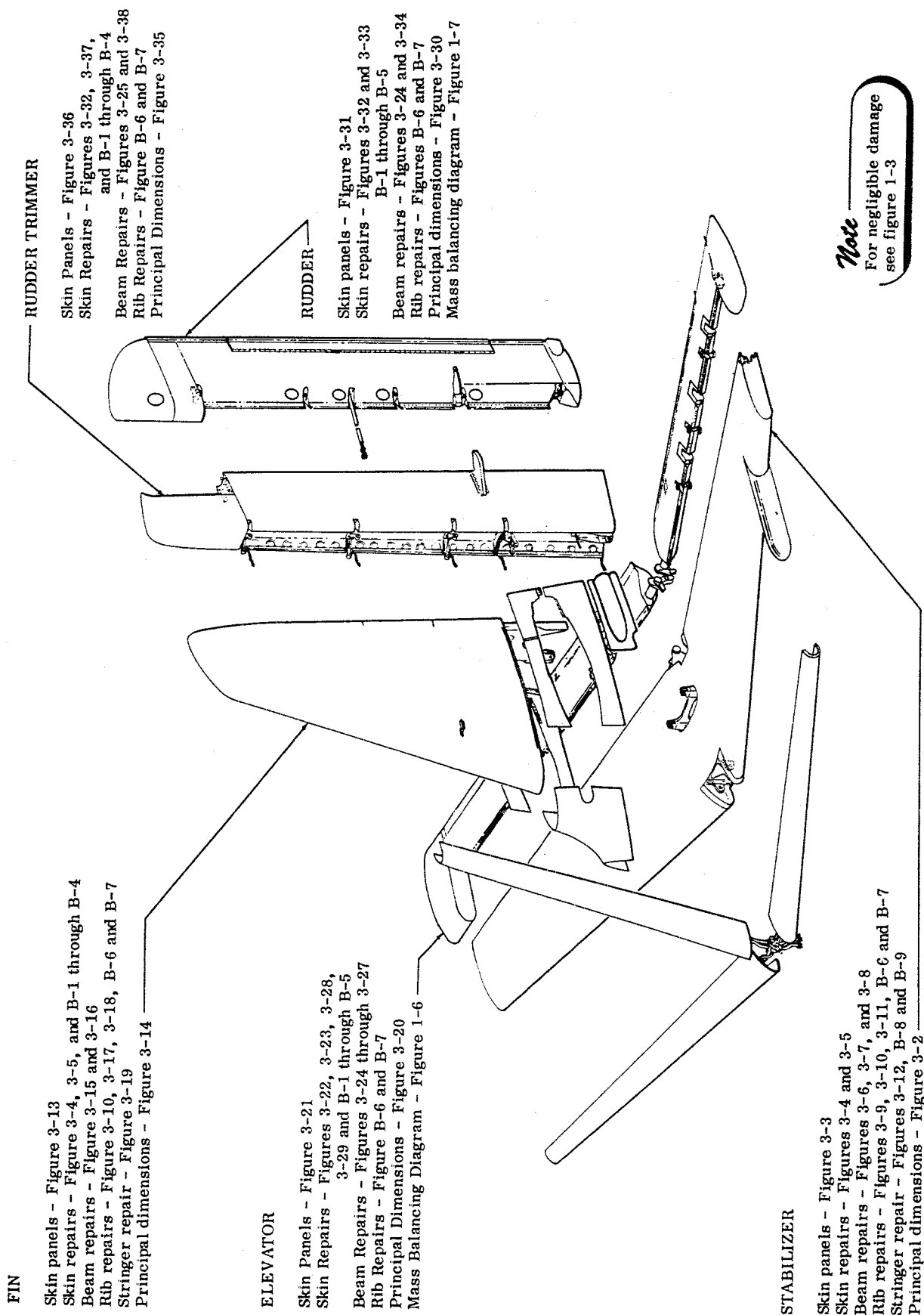


Figure 3-1. Tail Group

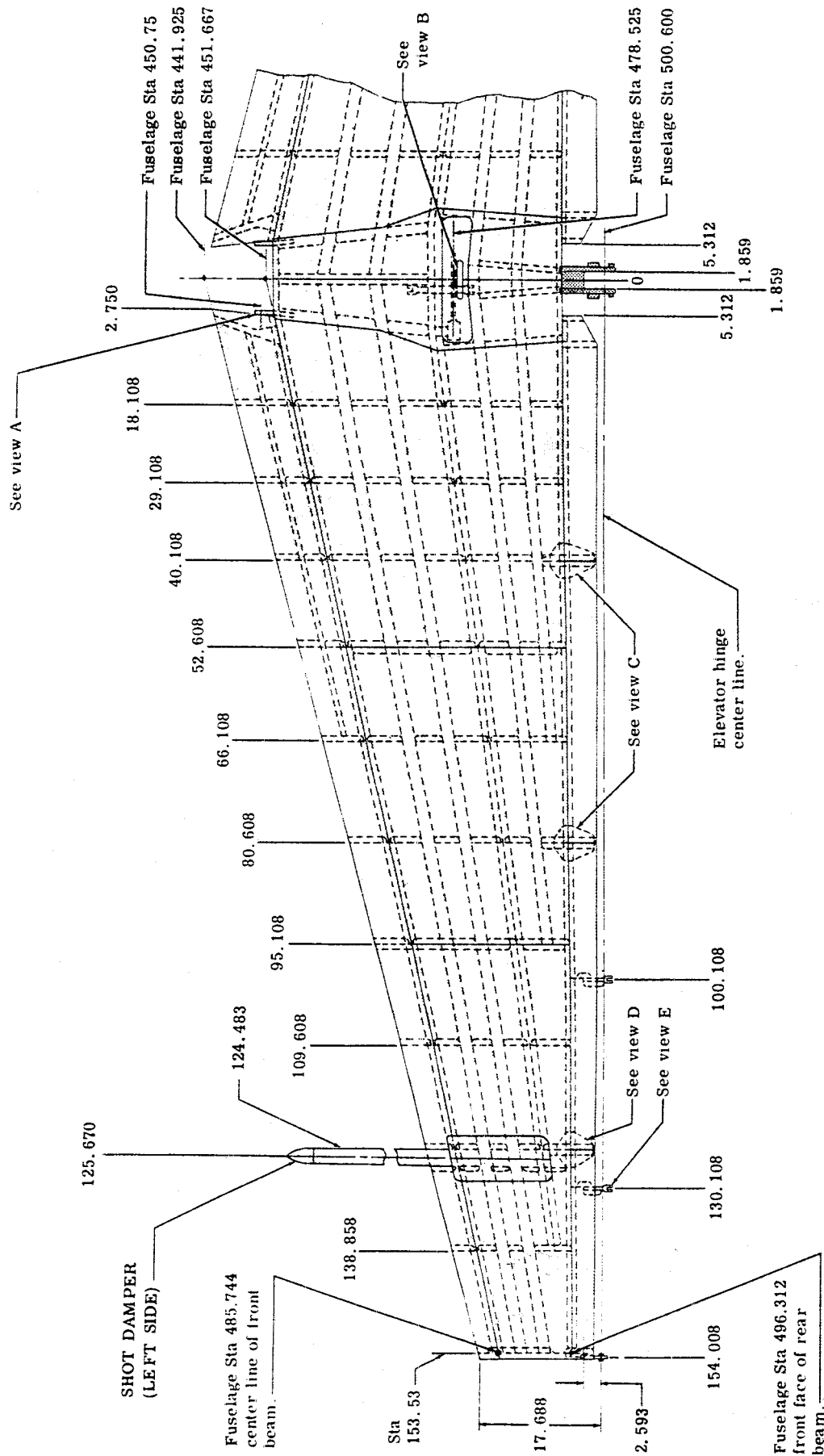


Figure 3-2. Stabilizer Principal Dimensions (Sheet 1)

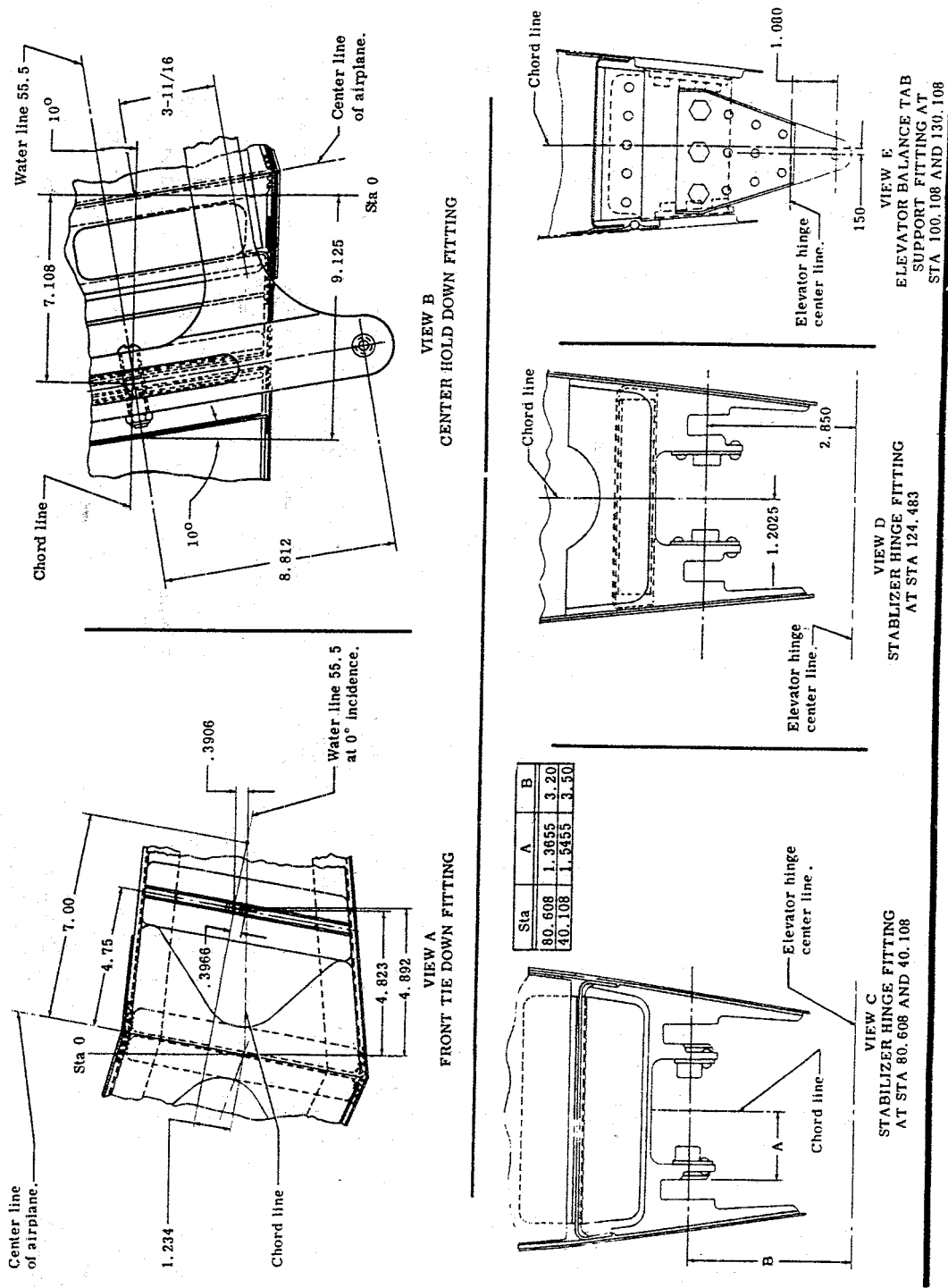


Figure 3-2. Stabilizer Principal Dimensions (Sheet 2)

Section II
Group Assembly Parts List

NAVAIR 01-855AD-4-2

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	UNITS PER ASSY	USABLE ON CODE
		1 2 3 4 5 6 7		
11 - 25	89T2159-2	. SKIN ASSY, RH	1	
- 26	89T2159-36	. . LEAF, BUTT HINGE /ALTERED FROM GOVT STD . . PART NO. MS20001PY6-4100/ /ATTACHING PARTS/	1	
- 27	89T2159-69	. . PIN, STRAIGHT, HEADLESS /ALTERED FROM . . . GOVT STD PART NO. AN253-2-4172/ - - - * - - -	1	
- 28	89T2159-34	. . LEAF, BUTT HINGE /ALTERED FROM GOVT STD . . PART NO. MS20001PX2-4100/ 89TM2060-1 . FITTING ASSY, FRONT TIE DOWN, LH	1	
	89TM2060-2	. FITTING ASSY, FRONT TIE DOWN, RH	1	
- 29	G26-M-6-4	. . BUSHING, SLEEVE	1	
- 30	89TM2060-3	. . FITTING, LH	1	
	89TM2060-4	. . FITTING, RH	1	
	89TM1823-1	. FITTING ASSY, MAIN BEAM TIE DOWN	2	
- 30A	G26-M-9-12	. . BUSHING, SLEEVE	1	
- 30B	89TM1823-3	. . FITTING	1	
- 31	89TM1286-1	. FITTING ASSY, STABILIZER CENTER HOLD DOWN . .	1	VY
	89TM1286-5	. FITTING ASSY, STABILIZER CENTER HOLD DOWN . . /ATTACHING PARTS/	1	VZ
- 32	NAS464P9-37	. BOLT, SHEAR	2	
	AN960D916L	. WASHER, FLAT	4	
	AN364-918	. NUT, SELF-LOCKING, HEXAGON	2	
- 33	G27-7-8	. . BUSHING, SLEEVE	4	
- 34	G27-9-22	. . BUSHING, SLEEVE	4	
- 35	G27-10-10	. . BUSHING, SLEEVE	4	
- 35A	89TM10057-3	. FITTING, STABILIZER TAB ACTUATOR MOUNT /ATTACHING PARTS/	1	
- 35B	NAS1103-4	. BOLT, MACHINE	8	
	AN960-10	. WASHER, FLAT	8	
- 36	121CSM10003-1	. FITTING ASSY, STABILIZER HINGE, LH	1	
	121CSM10003-2	. FITTING ASSY, STABILIZER HINGE, RH	1	
	121CSM10010-1	. . BUSHING	1	
- 37A	89TM1006-1	. HINGE ASSY, STA 40	2	
- 37B	89TM1005-1	. HINGE ASSY, STA 80.5	2	
- 37C	89TM2067-1	. HINGE ASSY, STA 124, 483	2	
- 37D	89TM10597-1	. FITTING, BALANCE TAB SUPPORT	4	
- 37E	NAS1104-5	. BOLT, MACHINE	3	
	AN960D416L	. WASHER, FLAT	6	
	G-N10U-428	. NUT, SELF-LOCKING, HEXAGON	3	
- 37F	89TM10298-1	. FITTING, OUTBOARD HINGE	2	
- 37G	NAS1104-11	. BOLT, MACHINE	6	
	AN960D416	. WASHER, FLAT	12	
	G-N10U-428	. NUT, SELF-LOCKING, HEXAGON	6	
- 38	89T2067-1	. SEAL, ELEVATOR TO STABILIZER	2	
- 39	89T2067-3	. SEAL, ELEVATOR TO STABILIZER	2	
- 40	89T2067-5	. SEAL, ELEVATOR TO STABILIZER	2	
- 41	89T2067-7	. SEAL, ELEVATOR TO STABILIZER	2	
- 42	89T2067-9	. SEAL, ELEVATOR TO STABILIZER	2	
- 43	89T2067-11	. SEAL, ELEVATOR TO STABILIZER	2	
- 44	89T2067-13	. SEAL, ELEVATOR TO STABILIZER	2	